# INTERNATIONAL STANDARD

ISO 9384

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# Fibre-cement siding shingles

Bardeaux en fibres-ciment



## ISO 9384:1991(E)

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### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are citallated to the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote.

International Standard ISO 9384 was prepared by Technical Committee ISO/TC 77 Roducts in fibre reinforced cement.

Annex A forms an integral part of this International Standard. Annex B is for information only.

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# Fibre-cement siding shingles

## 1 Scope

This International Standard specifies the characteristics and establishes methods of control and test as well as acceptance conditions for fibre-cement siding shingles, which are not covered by ISO 880.

It applies to shingles of dimensions not exceeding  $600 \text{ mm} \times 600 \text{ mm}.^{1)}$ 

#### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 390:1977, Asbestos-cement products — Sampling and inspection.

ISO 880:1981, Asbestos-cement siding shingles.

ISO 2602:1980, Statistical interpretation of test results — Estimation of the mean — Confidence interval.

#### 3 Composition

Siding shingles are flat elements for external cladding, formed by overlapping or juxtaposition of these elements.

Fibre-cement shingles consist essentially of an inorganic hydraulic binder<sup>2)</sup> or a calcium silicate

formed by a chemical reaction of a siliceous and a calcareous material, reinforced by organic fibres and/or inorganic synthetic fibres.

Process aids, fillers and pigments which are compatible with the fibre-cement may be added.

## 4 General appearance and finish

The exposed face of the shingles may be smooth or textured. The shingles may be coloured or left in their natural colour. The shingles may also receive coloured or clear coatings that are compatible with the base material.

The shingles may be supplied holed for fixing.

# **Characteristics**

# 5.1 Sepmetrical characteristics

# 5.1.1 Thickness

The method of measuring thickness is specified in 6.1.3.

The nominal thickness shall be specified by the manufacturer.

## 5.1.2 Tolerances on nominal dimensions

- a) on length and width:  $\pm 3$  mm
- b) on thickness:
  - smooth shingles:  $^{+25}_{-10}$  %
  - shingles with textured face:  $\pm 25 \%$

<sup>1)</sup> National standards may include shingles with dimensions exceeding 600 mm. In this case, all tests with the exception of the heat-rain test should be carried out on elements cut from such shingles. The heat-rain test should always be conducted on full-size shingles and the dimensions of the test rig should be adapted accordingly.

<sup>2)</sup> National standards may specify the binder to be used.